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THE QUEEN BEE.

To the Editor of the New England Farmer.

Having read some of the various theories on the Honey Bee, and compared what I read with my own observation on the bees themselves, I have become satisfied, that notwithstanding so much has been written, very little is known of the government, police, or interior arrangements of the inmates of a bee hive.

Writers inform us that a "*swarm of bees contains One Queen, Five Hundred drones and Nineteen Thousand Four Hundred and Ninety-nine neuters.*" Who knows any thing about this? Could we at pleasure examine the inside of an inhabited hive and closely watch the movements therein, we might form some opinions as to this army of neuters marshalled by a queen and drones, but human ingenuity can devise no way in which this can be done with any degree of exactness; we can only look around us and see how it is with other insects and animals who can be examined with impunity. Where throughout animated nature can we find a parallel? Does nature usually form neuters or are bees an exception?

But neuters are not my object in this communication. I am even so much of an infidel as to doubt the existence of a Queen Bee. My doubts are caused in part by the following circumstances. I have carefully examined several swarms of bees after suffocating them with fire and brimstone, without being able to find *her majesty of "about eight lines and one half in length, her wings so short as scarcely to reach past the third ring and her color a deep yellow.* The present season one of my hives swarmed and settled on the limb of a young apple tree near the ground. In a few minutes after, another hive swarmed and collected on the same limb nearer its end, leaving a space of about two inches between the swarms. The additional weight of the last swarm brought the limb so near that the wind swung it against the ground so as to incommode the last comers. They began to gather up the limb nearer the first swarm and finally formed one cluster of bees, which I put into a flour barrel. They commenced working, and have now every appearance of prosperity. In this case where were the two queens who "*are infused with the most deadly hatred and the most insatiable thirst for each other's life, which nothing but actual death can appease?*" About sun set on the sixth of the present month I accidentally noticed a great stir amongst my bees, and on examination found a constant passing and repassing between an old hive and a late swarm from the same old hive, standing some eight or ten rods apart. The following morning at daylight the same intercoure was continued. The bees passed by thousands and both hives appeared alive with bees. Although very anxious to find out what they were about, yet as there was every appearance of perfect harmony in their proceedings, be they what they might, I left them to settle their *own business in their own way*, and on my return after an absence of two days found that the old swarm had abandoned their hive to the bee moth and gone to reside with their children, having removed every particle of honey to their new habitation, leaving comb, bee bread, and moths in the old hive. Where were "the rival queens, who always lead the swarms, and cannot dwell in the same hive?"

In what age of the world the discovery was made, that a hive of bees contained but one female and that one *the ruler of the swarm*, is unknown, probably when a great taste for the marvellous was in fashion, and Huber and subsequent writers could adopt a plausible theory with much greater safety than to thrust their heads into a bee-hive and watch the bees for some days. J. B. T.

August 18, 1838.

NEW VARIETIES OF MULBERRY.

Extract from a letter from Wm. Prince and Sons of Flushing to C. S. Pool, Esq. relative to some new varieties of the Mulberry, dated August 8, 1838.

Dear Sir—We now answer your queries relative to the new Hybrid varieties produced by an intermixture of the Multicaulis and Dandolo Mulberries. The leaves of the Hybrid Multicaulis, of which as we stated we have several varieties, are nearly as large as those of the original Multicaulis and some are quite so, and the worms feed on them with equal partiality. They are perfectly smooth and glossy and remarkably tender, being similar in this respect to their Chinese parent, and they are rather thicker and heavier. The joints are closer, the trees are profusely clad with foliage as that species and many consider them more so, and our opinion is that the weight of foliage is rather greater.

The silk is very beautiful and strong, assimilating in this respect to that from the Multicaulis. But the great advantage they possess is that of being far more hardy. We left above ten thousand young trees entirely exposed the last winter in a very bleak northern aspect, all of which were grown from layers the last summer and on which all the wood was formed after the 10th of June, which rendered it much less mature than is usual, but the result proved most propitious, as not one of the trees was injured. It may be also interesting to state that these varieties, almost incredible as it may seem, form roots from cuttings and layers with even greater rapidity than the Multicaulis itself. It will be highly gratifying to us, to have you and all other silk culturists call upon us and take a view of these trees, as you will then perceive at a single glance that their value is beyond all price, and that the great desideratum of variety of the Mulberry with an enormous burden of foliage, and possessing all the most desirable requisites for the silk culture is at length fully attained. The whole number we now have does not exceed 25 or 30,000 and there are none others in the Union as we have not up to the present period offered any for sale.

The *Morus expansa* has very large leaves next in size to the Multicaulis and its new seedling varieties. The leaves are much thicker and seem more succulent and nutritious than any other variety we have yet seen. They are perfectly smooth, and remarkably glossy, and greatly beloved by the worm. The silk is of superior strength and of the choicest quality. There is no variety that produces a greater weight of foliage than this, unless it be the new hybrid varieties of the Multicaulis, which in connexion with this will be sure to command the precedence wherever cultivated. This tree may be deemed the very hardiest of all the superior varieties of the Mulberry,—and in a nursery of about 17,000 trees which we left standing the last winter in an extremely cold and bleak location, not the smallest end of any shoot was injured.

Linnæan Garden and Nurseries,
Flushing, near New York.

From the Maine Farmer.

CURING GRAIN.

The following letter was handed us for publication, by Charles Vaughan, Esq. of this town. It contains valuable information on the subject of curing grain, which we would commend to the attentive perusal of our readers.

North Dixmont, July 31, 1838.

Charles Vaughan, Esq.—*Dear Sir:* Yours of the 25th inst. I have duly received, and shall with pleasure comply with your request, to give some account of my method of curing wheat.

And first—I will state that I cut my wheat when it is so green that the kernel can be easily mashed with the fingers—for these reasons: The grain can be bound and stooked much better, than when the straw is dry,—the straw is worth twice as much for fodder,—there is less waste in carting, —the flour is whiter—and there is no diminution of the crop, when managed in the following way.

Bind on the same day that you reap, as the straw should not dry in the "gavel." Bind with single bands, and those not full if the grain be tall. Bind sheaves for the caps, as you proceed in binding, out of the longest and straightest of the grain; bind them near the "butt," and very tight,—and if they are considerably larger than the others they will cover the stock better.

Set four pairs of sheaves firmly on the ground, bottoms apart, tops together, and one at each end—place your arms at one end of the row, extend the arms to the other, and gently press the tops of the whole towards the centre. Put on three caps—the middle one first,—in putting on the outside caps, drop them as low as the band of the end sheaf—then with a gentle pressure slide them up into their place, and tie them together. By this means the grain is covered deeper than by saddling them on at once.

The advantages of this mode of securing grain will be seen at once. It admits a free circulation of air among the sheaves. The caps are so near a perpendicular direction, that the water easily runs

off—and as the tops of the sheaves incline to the centre, they support each other, and will stand till the grain is thoroughly cured.

I am well satisfied with the ram. He has grown well, and is fat; his fleece weighed 5 1-4 lbs.

I have raised 26 lambs, of good quality for size and wool. At shearing time I weighed two of the best of them; one was just two months old and weighed 44 lbs.—the other was five days older, and weighed 46 lbs.

Just a month from that date my steelyards, which draw 60 lbs., would not swing him. By housing time he will probably be as large as the ram was when I bought him.

Yours truly,
HORACE WILDER.

(Published by Request.)

NEW SYSTEM OF EDUCATION.

In the last message from De Witt Clinton to the Legislature of New York, he remarked, that with a proper system of education, and correct modes of teaching, all our children might become familiar with the physical sciences, botany, mineralogy, the various classes of animals, chemistry, natural philosophy, astronomy, the fundamental principles of agricultural and political economy, and with much in history and biography, without any additional expense of time or money for their instruction.—The soundness and truth of this remark has since been fully proved by the system of education in Prussia and other German States: as it has by schools for deaf mutes and the blind in this country.

The following facts also show that the same remark may be fully sustained as a plain deduction of reasoning:

1. Spelling books, in common use, contain from ten to fifteen thousand words. To learn the orthography of each word by the dint of memory, founded on the arrangement or relative position of the letters, must require as much time and effort as to learn the names, properties, and uses of ten plants, minerals, animals, or shells; or ten principles in chemistry, natural philosophy, astronomy, agriculture, or political economy; or the same number of facts in history or biography. Consequently while a child is committing to memory the words in a spelling book, he might learn a hundred thousand of the objects, principles, or facts above referred to.

2. The time, paper, ink and quills, ordinarily used by children in school, in *copy writing*, would be sufficient for writing the names, with brief descriptions of the same objects, principles, and facts.

3. The time spent in repeating lessons from reading books, if devoted to the reading and study of the Bible, works on science, history, &c. would be sufficient for examining with some care, and for some *critical reading* of, at least one author, on each of the subjects above mentioned.

4. The time usually spent in *memorizing* grammar lessons, would be sufficient for practical and critical exercises in descriptions and narrations, relating to the objects of nature and art, with scenery, operations, and events, witnessed by children during the period of their school days and years.

5. By this practical, rational, and consequently interesting cource of exercises in spelling, writing, reading and grammar, it must be evident to every one, that children would become more familiarly and thoroughly acquainted with these mechanical parts of education, than they could possibly be by a mere repetition of them for days, months and years, like so many parrots, without any knowledge of their meaning, sense, or use.

In proof of the correctness of the above statements, I beg leave to mention that I have had occasion to know many thousand children who have learnt the names, and something of the properties, of from twenty to thirty objects in one hour, many of whom had probably spent, not only days and weeks, but months, if not years, in learning the twentysix letters of the alphabet; and after all they probably did not obtain *one* distinct rational idea, from what was considered their instruction, though, it is true, they must have received many from their sports, and from their walks to and from school.

To secure the important objects specified by the distinguished statesman and philosopher above named, and now realized by the subjects of some absolute monarchs, the following provisions are desirable, perhaps essential:

1. Encouragement and aid to children in studying the volume of nature, with which all are delighted, and which they commence reading when they first open their eyes upon the light of heaven.

2. Assistance in collecting, arranging, and *exchanging with others*, specimens of minerals, plants, shells, drawings, mechanism, needlework, &c. &c. for the contents of FAMILY CABINETS.

3. The formation of "SCHOOL CABINETS" in all the seventy thousand schools in our country, and exchanges with each other in works of Nature and Art.

4. The early and daily use of slates for drawing objects of Nature and Art, such as the simple figures of geometry, viz: triangles, squares, hexagons, and circles; horses, dogs, birds, fishes, and insects; hatchets, knives, pitchers, shovels, ploughs, &c.

5. Writing words, or names of things, as dog, cat, hat, oak, rose, mica, lime, slate, &c., in connection with the things themselves, or pictures of them drawn by the children.

Following the pictures and names of objects, brief and familiar descriptions of them, first on slates, and then on paper, by lead pencils, followed by pens.

6. Simple instruments for visible illustrations, both in families and schools, viz: a globe, geometrical solids, levers, pullies, screws, maps and other drawings or prints, &c. &c.

7. Frequent walks in the fields and gardens, over ledges or mountains, by rivulets or brooks, through markets, on wharves, in mechanics' shops, marble and granite yards, aided and encouraged by the presence and instruction of a teacher, parent, older brother or sister, or some other protector.

8. Small, simple and familiar books, describing the objects, principles or operations they have witnessed by their lessons in the book of Nature. With these some of the beautiful and interesting passages from the Bible, selected from the Gospels, the Psalms, Proverbs, or the historical sketches of the Old Testament, are peculiarly appropriate and delightful to children.

9. Larger and more systematic works on the sciences, arts, history, biography, and the Bible more fully, with abstracts, reflections, or drawings, of things and incidents, learnt from first elements of mature study.

10. Releasing children, principally or entirely, from the incongruous, unmeaning and irksome masses, found in spelling books, reading books and grammars, now consuming the greatest part of the precious time of children allotted to their education.

As a course of juvenile instruction, similar to that here pointed out, must commend itself to the common sense of every one, and as it is fully tried and corroborated by experiments, both in Europe and America, it is, at least, worthy of trial by every parent and teacher in our Republican nation.

I remain, as ever, sincerely yours,
J. HOLBROOK.

GEOLOGY OF MASSACHUSETTS.

We have made a few extracts from Professor Hitchcock's Geological Report, which will undoubtedly be read with much interest. We think this report is of much importance to the agriculturalist, as well as to the geologist, and shall from time to time give some extracts from it. J. B.

EXAMINATON FOR CALCAREOUS MATTER IN OUR SOILS.—A preliminary step of great importance in this analysis, consisted in a examination of the soils to ascertain whether they contain lime in the state of a carbonate;—that is, common limestone. And I conducted the process in the following manner. A small quantity of the soil was introduced into a watch glass, so placed that the light from a window would fall upon it. This soil was covered with water to a considerable depth. The soil was then stirred until all the light matter and every bubble of air had risen to the top. The impurity that floated on the surface was then removed by drawing over it a piece of bibulous paper, so that the water stood perfectly clear above the soil. Then a few drops of muriatic acid were added by a dropping tube, and the water was carefully watched to see if any bubbles rose through it, as they would have done if any carbonate were present. The minutest quantity of gas escaping, could in this manner be perceived. The result disclosed the remarkable fact, that *out of one hundred and twenty-five specimens of soils from all parts of the State, and several of them from limestone tracts, only seven of them exhibited any effervescence*; and even these, when analysed, yielded but a very small per cent of carbonate of lime, viz:

No. 31.	Graywacke soil Watertown,	1.3	per cent.
— 51.	Limestone soil, Sheffield,	0.8	"
— 52.	Do. West Stockbridge,	3.2	"
— 78.	Gneiss soil, Westminster,	3.0	"
— 80.	Do. Fitchburg,	2.1	"
— 113.	Sienite soil, Wrentham,	0.4	"
— 125.	Greenstone soil, Deerfield,	2.0	"

Even in three of the above cases, Nos. 78, 80 and 125, I am strongly suspicious, that the calcareous matter might not have been natural to the soils. For, contrary to my usual custom, in these cases I took the specimens from small patches of cultivated ground near villages; and very likely these spots might have been manured with sea shells, or lime in some other form. Setting these aside, *only one in thirty of our soils contains any calcareous matter.* This is so different from the account given in the books of European soils, that it will doubtless be very surprising. For some of these contain more than 50 per cent of this substance; and nearly all of them a large per cent. But in our country the lack of calcareous matter is not confined to Massachusetts. In the able work of Edmund Ruffin, Esq. of Virginia, on calcareous manures, a similar statement is made respecting the

soils of that State, and of some of the Western States, even in limestone regions. I have, also, recently examined five of some of the richest soils of Ohio and Illinois, and although I find calcareous matter in all but one, yet the average quantity is not over two per cent. Hence I apprehend that we shall find a deficiency of carbonate of lime to be quite characteristic of a large part of the soils of this country. This could not always have been the case, especially in limestone regions, and hence we learn—what indeed agricultural chemists now generally admit—that in cultivated fields, calcareous matter is gradually changed or consumed: and hence too we learn, what is one of the great desiderata of the soils of Massachusetts.

NEW METHOD OF ANALYSING SOILS.—Without stopping to suggest any means for supplying the deficiencies which the preceding analyses have shown in our soils, I proceed to the developement of a new method of analysis, which I very unexpectedly received from a distinguished chemical friend, and which he has allowed me to present in this Report, with its application to our soils. It is the invention of Dr Samuel L. Dana of Lowell; to whom, as will appear in the sequel, I am indebted for other important assistance in the way of analysis. In order to its being fully understood and appreciated, a few prelimary statements from myself, in addition to those by Mr Dana, will be necessary.

Till within a few years past, the state in which vegetable and animal matter exists in the soil, and the changes through which it passes, before being taken up by the roots of the plant, were almost entirely unknown to chemists. Long ago, however, Klaproth had discovered a peculiar substance in the elm tree, which he denominated *ulmin*. More recently it was found by Braconnet in starch, saw-dust, and sugar; and by the distinguished Swedish chemist, Berzelius, in all kinds of barks. Sprengel, and Polydore Boullay have ascertained, also, that it constitutes a leading principle in manures and soils. Hence they call it *Humin*; but Berzelius adopts the name of *Geine*. When wet, it is a gelatinous mass, which, on drying, becomes of a deep brown or almost black color, without taste or smell, and insoluble in water; and, therefore, in this state of being absorbed by the roots of plants. Yet after the action of alkalis upon it, it assumes the character of an acid, and unites with ammonia, potassa, lime, alumina, &c., and forms a class of bodies called *Geates*, most of which are soluble in water, and therefore capable of being taken up by plants. And it is in the state of geates, that this substance for the most part exists in the soil. I have thought it might at least gratify curiosity and perhaps be of some practical use, to add specimens of these forms of geine to the collection of soils. No. 227 is pure geine; No. 226 geate of pottassa: No. 525 geate of lime: No. 225 geate of alumina.

It is but justice to say, that Dr Dana derived his knowledge of geine chiefly from his own researches, made with a view to improve the coloring processes in the Calico Printing Establishment, at Lowell: and his method of analysing soils is altogether original. The statements of Berzelius, indeed, though interesting in a theoretical point of view, afford a very little light to the practical agriculturist. Those of Mr Dana appear to me to be far more important in a scientific as well as practical point of view; although essentially coinciding with those European chemists, so far as they have gone. His method of analysis, derived from his researches, I must say, after having made extensive application of it to our soils, is simple and elegant, and taken in connection with his preliminary remarks, it appears to me to be a most important contribution to agricultural chemistry, and promises much for the advancement of practical agriculture. I trust it will be favorably received by the government, and by all intelligent men, who take an interest in the subject. His preliminary remarks and rules I shall now present in his own language.

"By *geine*," says he, "I mean all the decomposed organic matter of the soil. It results chiefly from vegetable decomposition: animal substances produce a similar compound containing azote. There may be undecomposed vegetable fibre so minutely divided as to pass through the seive: (see first step in the rules for analysis) but as one object of this operation is to free the soil from vegetable fibre, the portion will be quite inconsiderable. It can effect only the amount of insoluble geine. When so minutely divided, it will probably pass into geine in a season's cultivation. Geine exists in two states: soluble and insoluble: soluble both in water and in alkali, in alcohol and acids. The immediate result of recent decomposition of vegetable fibre is abundantly soluble in water. It is what is called, Solution of Vegetable Extract. Air converts this soluble into *solid* geine, *still partially soluble in water*, wholly soluble in alkali. Insoluble geine is the result of the decomposition of solid geine; but this insoluble geine, by the long continued action of air and moisture, is again so altered as to become soluble. It is speedily converted by the action of lime into soluble geine. Soluble geine acts neither as acid nor alkali. *It is converted into a substance having acid properties by the action of alkali*, and in this state combines with earths, alkalies, and oxides, forming neutral salts, which may be termed *geates*. These all are more soluble in water than solid geine; especially when they are first formed. Their solubility in cold water is as follows: beginning with the easiest, magnesia—-lime—-manganese—-peroxide of iron—(it does not unite with the protoxide of iron) alumina—baryta. The geates of the alkaline earths are decomposed by carbonated alkali. The geates of alumina and of metallic oxides are soluble in caustic or carbonated alkali without decomposition. The geates of the alkaline earths, by the action of the carbonic acid of the air, become *super-geates*, always more soluble than neutral salts. Soluble geine, therefore includes the watery solution—the solid extract caused by the action of air on the solution, and the combinations of this with alkalies, earths, and oxides. Insoluble geine includes all the other forms of this substance."

"Soluble geine is the food of plants. Insoluble geine becomes food by air and moisture. Hence the reason and result of tillage. Hence the reason of employing pearlash to separate soluble and insoluble geine in analysis."

"These are the facts. Will they not lead us to a rational account of the use of lime, clay, ashes and spent ley? Will they not account for the superiority of unfermented over fermented dung in some cases?"

To be continued.

One of the best forms of exercise for adults is gardening and light farming. Boys and girls require sports which are more active.—*Library of Health.*

LOCUSTS.—A writer in the Boston Daily Advertiser, from the southern part of the Commonwealth, says this is the year for the re-appearance of the seventeen year locusts, their last visitation in that quarter having been in 1821. These insects have a distinctly marked W on their backs. Shortly before their disappearance, many of the small twigs of the young oak appeared to be girded and cut off, and hung suspended from the extremities; the leaves turn red, as when touched by the frost in autumn. On examination, these twigs appear to be sawed about two thirds off, and girdled, so that the circulation of sap being cut off, it soon dies, and probably falls to the ground in the course of the ensuing winter, by the action of wind, rain, and snow. The general belief is, that by a curious and remarkable instinct, the insect is led to deposite its eggs in some mode upon these small twigs, and there thus partially to save them from the parent stalk, so that by their fall the eggs shall be borne gently and safely to the ground, into whose bosom they are in some form to be received and cherished, to re-appear in the form of the full grown locusts, after the lapse of seventeen years. The emblems presented by this beautiful and brilliont insect, rising from the earth, after being so long buried, full of life and activity, making the woods vocal with its shrill and animated song, is a beautiful one.—*Salem Gazette.*

SILK WORMS.—Before the worms are hatched, the eggs should be weighed, and the weight written on the back of the paper to which they are attached. When the silk worms are hatched, take care not to separate them from the paper. There are many persons who as soon as they see the worms hatch, detach them from the paper, with a small broom or quill; but these little beings, as delicate and slender as a hair, or a bit of silk, cannot support the wounds given them with the broom or quill. The Mulberry leaves must be cut into extremely fine shreds, and spread in an equal manner, upon a large sheet of paper. The side of the paper on which the worms are hatching, must be applied to that which is covered with bits of the mulberry leaves. The worms liking the smell of the mulberry leaves, descend themselves on the paper, destined to receive them.

Then the paper, on which the eggs were, must be newly weighed; the quantity of hatched worms will be known, and it can be calculated how many worms will be required to feed them. It is much better to have more leaves than are wanted for the number of silk worms to be raised. Then an abundant nourishment will be had for the silk worms, and one will not be exposed to the misfortune caused by a scarcity of leaves.

There are many persons who do not make this calculation beforehand: but when the leaves are about failing, they find themselves reduced to the most painful extremities; they pawn or sell their effects to procure them. They have the grief of seeing their silk worms tormented by hunger; the hurdles are strewed with worms that languish and die. Thus by their want of forecast, they uselessly sacrifice the lives of a great number of these precious insects.—*Translated from the Chinese.*

TEMPERANCE IN THE SANDWICH ISLANDS.—The King of Oahu has suppressed all the grog shops except two, and placed them under severe restrictions.

From the Genesee Farmer.

WOODLANDS.

That the woodlands of our country have decreased, and are decreasing to a most alarming extent, no one can doubt; and when we remember the great quantity of wood annually required for fuel, fencing, and building, and see little or no effort made to supply the loss, we feel that the subject of planting trees for timber as well as for ornament, cannot be too earnestly pressed on the attention of the owner or cultivator of the soil. The great difficulty in any undertaking of this kind appears to lie in the time that will be required before any actual return can be realized from the capital required to be invested. Men should, however, remember that all their thoughts and their labors should not be for to-day, but that true greatness of mind takes in the future as well as the present; contemplates the wants of posterity as well our own; and if *money alone* is the object of exertion, finds by matter of fact calculation, that lands planted with timber will in thirty years pay a better interest, than the same amount expended in state stocks.

In any arrangements respecting woodlands, the first care of the farmer or land owner should be to save what he has, and place it in the best condition for increase. No matter what the kind of timber may be; experience shows that where woodlands are protected, young trees will rapidly spring up to supply the place of those taken away, and that either from seeds, or from suckers springing from the stump or the roots, the drain will be more than supplied so far as number is concerned.—Where lands left for wood are allowed to be a thoroughfare for cattle and sheep, the growth of young timber is impossible. The shoots are destroyed as soon as produced, and all the efforts of nature to supply the waste must be in vain.—When it is desirable to produce a thick growth of young timber in a grove or wood lot, let it be thoroughly enclosed, and there can be no doubt as to the result; in a few years thinning will be required instead of planting, and it should too be remembered that in this case, the timber grown is of the kinds adapted to the soil, stands where it is wanted, and can be multiplied to any desirable extent.

But in many cases it is requisite to plant new varieties, and where new woodlands are to be commenced, a knowledge of the kinds best adapted to the soil, or the purposes intended, whether fuel, or timber, should be obtained. In such cases recourse must be had to seeds, unless nurseries of forest trees are at hand, which can hardly be expected where planting to any considerable extent is to be performed. The seeds of forest trees have been divided into five varieties, the most of which require different soils, and different treatment in preparing and planting. 1st. The *farinaceous or nut seeds;* such as the oak, chestnut, beech, walnut, elm, maple, and basswood, sycamore and ash; with many shrubs, such as hazel, alder, &c. 2d. *Hard seeds*, or stones enclosed in pulpy fruit. Of this class are the cherry tree, pear, crab, thorn, mountain ash, and others. 3d. *Leguminous* or bean seeds, of which the Locust (yellow and honey) and the laburnum, are the only varieties of forest trees or shrubs. 4th. *Light seeds*, under which may be enumerated the poplar, smooth elm, and the tree willows. 5th. The *resinous seeds*, or those belonging to the spruce, pine, and fir trees.

In England, where for hundreds of years great attention has been paid to planting and growing timber, and where there are probably more artificial woodlands than in any other country of the same extent, it has been found by experiment that the fir, the beech and the birch, succeed best on sandy moor soils, incumbent on shale, or siliceous sand of great depth. The pine, larch, spruce and sycamore will succeed on an inferior sandy soil, incumbent on shale or coarse gravel. The sycamore will, however, flourish in almost any place not too cold, for its presence on our richest intervals proves that richness of soil is no obstruction to its growth. The oak, chestnut, whitewood, &c. grow rapidly on a soil light siliceous, if incumbent on a damp, clayey subsoil; but the soil that brings these trees to the highest state of perfection, is a clayey loam, incumbent on a clay subsoil. Some of the finest oaks and chestnuts in England are growing on a soil of which the analysis is as follows:—

Coarse gravel, partly calcareous,	40
Fine Sand,	190
Carbonate of lime,	16
Decomposing vegetable fibre,	14
Silex,	90
Alumina, or pure clay,	30
Vegetable extracts, oxides of iron, salts, &c.	20
	400

The soil best adapted to the elm, maple, ash and horn-beam, is one damp, clayey, and incumbent on clay, or composed mostly of coarse siliceous gravel, silica, and alumine. The maple accommodates itself to a greater variety of soils than most other trees, and is found in western New York, on almost all kinds, excepting the most light and sandy, or those based on shallow covered calcareous rock.

By paying a little attention to the soils on which any kinds of timber are growing naturally the quality of the soil on which the planting of any desired variety of tree intended may be known at once; and if a soil is found on which most of our forest trees, such as the oak, chestnut, whitewood, basswood, white maple, walnut, black walnut, &c. are growing or have grown together, it will be found the best for almost any new variety of forest tree, as such soils are usually deep, and made up of ingredients suitable, in the main, for all. In general it may be remarked that where the soil is good for wheat, there the oak, chestnut, and tulip tree will flourish; where the soil is adapted to corn, there the sycamore, locust, the walnuts, and some of the elms will succeed; and that on all soils where spring grains are found the most profitable, the white elm, ash, maples, and the hardier evergreens will be the best. The pine, the locust, the maple, and the oak, require different soils, as the slightest observation of their natural growth will show; and though trees will make great efforts to accommodate themselves to any soil, yet where planting is to be performed, those the most suitable to the soil, and which will be of the most value in the particular location should always be preferred. The surest guide in such matters is to follow nature. Where it is desired to timber low lands, the cypress, black ash, swamp pines, and trees of this class, will be always available, according to circumstances.

In selecting as trees for cultivation in woodlands, a few which are valuable for fuel, timber, or mechanical purposes, our directions for the time of sowing seed must be mostly derived from European publications, as little attention has, as yet, been paid to this method of propagation in this country.

Basswood, *Tilia Americana.* Seed to be sown in Autumn, in moist, light soil; but the usual mode of propagation is by layers. Basswood, like the chestnut, throws up abundance of suckers from the stump, and where woodlands are protected no other means of increase are required.

Walnut, *Juglans;* including the common walnut, hickories, black walnut, butternut, and pignut. 'Preserve the nuts till the latter part of winter in their outer covering after which they may be sown.' Slightly covered in the ground, and left to freeze through the winter, these nuts usually vegetate without difficulty. We have raised several hundred plants of the *Juglans cathartica* simply by allowing the nuts to lie in the grass where they fell from the tree, and transplanted them after one year's growth.

Maple, *Acer.*—'The seeds should be preserved in dry sand till spring, and then sowed early; but should the soil be dry and free from the attacks of vermin, it is advantageous to sow as soon as the seeds are ripe.' In this country transplanting from the forest will most probably be the easiest method of obtaining this beautiful and valuable tree, which deserves cultivation to a great extent.

Locust, *Gleditschia* and *Robinia.*—The seeds of the locust were formerly among the most difficult and uncertain of vegetation, sometimes lying in the ground two years. But by gathering the seeds when ripe, preserving them till the spring, and then pouring boiling water upon them, and allowing them to remain till swelled, they will grow with certainty. The soil for a locust nursery should be warm and deep; and the tree itself will flourish best in a gravelly and moderately rich soil—cold, wet, clayey grounds are unfit for the locust. It is a tree of rapid growth, and the excellence of its timber is well known.

Ash, *Fraxinus.*—The time of sowing the seeds of the white or black ash, is in autumn, or as soon as ripe, and the plants will frequently appear the the same season. If the seeds are kept over the winter, it should be in dry sand; and they should be sown as early as the ground can be prepared for their reception.

Whitewood, *Liriodendron*, or tulip tree.—The seed must be sown in the spring, in a light soil. This tree grows quickly, has beautiful foliage, and fine flowers, and its wood for many purposes is is ranked next to pine.

Poplar, *Populus.*—All the varieties of poplar may be propagated by cuttings, suckers, or layers; the first mode is generally preferred. The poplars are of rapid growth but are unfit for fuel. Were it not for this fact, some of the varieties of the poplar would be the most valuable trees for woodlands that could be selected.

Birch, *Betula.*—The seed may be sown in autumn or spring, but must be kept in dry cool sand from the time it is ripe till sown. The black birch is the most valuable of our varieties, being of quick growth, excellent for fuel, and a valuable timber tree. Russian leather owes its durability, and its freedom from the attacks of insects, to an empyreumatic oil obtained by burning the bark of the birch tree in kilns constructed for that purpose.

Oak, *Quercus.*—Sow the acorns in November, or if kept till spring, lay them on a cool dry floor. We have this season seen hundreds of young oaks sprung from acorns that lay where they fell last

autumn. But two kinds of oaks are of much consequence as timber trees in our latitude, the white and the black, *quercus alba* und *quercus tinctoria*, and these may be grown in almost any soil, though they prefer a rich clay loam, with a clay subsoil.

Beech Tree, *Fagus.*—Seeds to be sown in the fall; the only danger is to be apprehended from mice, as they sprout and grow with much certainty. The beech is good for fuel; and is highly prized where weight and solidity are required, particularly the wood of young and thrifty trees.

Chestnut, *Castanea.*—Seed to be sown early in the spring, in a rich, sandy loam; and it is in such a soil that this valuable tree attains its greatest perfection. It may, however, be grown in any soil where the roots can spread freely and are not subjected to stagnant moisture. Lands covered with chestnut timber, are very valuable, as they can be cut every twenty-five years for posts, rails, &c. and require no replanting, or care to secure a continued growth, except protection from cattle for a few of the first years of their growth.

Plane Tree, *Platanus.* Sycamore or Button Wood.—Seeds to be sown as soon as ripe in a moist shady situation; and the tree prefers moist loam, free from stagnant water. It is a tree of large growth, makes a fine ornamental tree, and is good for fuel.

Elm, *Ulmus.*—'Seeds to be sown as soon as ripe, on a bed of fresh loamy earth, to be shaded from the midday sun until the plants appear to be well rooted. There are a number of varieties of elms growing in our forests, but the two most deserving of notice are the white elm, and the red elm. The red elm is the most valuable for timber of any of our varieties, but the white elm exceeds it in beauty and rapidity of growth. Michaux has pronounced the elm the most magnificent vegetable of the temperate zone; and the size they attain in our forests is astonishing.

Cypress, *Cupressus.*—Seed to be sown in spring, in a warm situation, or in pots in light dry earth, to be kept in the cones till the period of sowing. The wood of the cypress is very durable. Prof. Martin says 'the doors of St. Peters church, at Rome, were made of this wood, and lasted eleven hundred years? Worms rarely attack it. The common American cypress attains the largest size in low, damp soil, though it will grow in those that are loose and sandy loam. In the swamps on the Mississippi below latitude 31 deg. it grows to the height of 120 feet, and is sometimes 40 feet in circumference near the ground.

Pine trees, are generally transplanted, or are allowed to spring up spontaneously; but where seeds are used, they should be sown immediately after being gathered as their vegetative power cannot be preserved for any considerable length of time after being taken from the cones. The seeds must be planted in fine light earth, and covered very lightly. The spruce, balsam fir, stone pine, and indeed all the resinous trees, or coniferous ones, require a similar treatment to succeed in the vegetation.

We have thus noticed a few only of the many trees that might be beneficially planted for the formation of woodlands; and the cultivation of some or all of them should be entered upon by the most of our farmers without delay, the selection being made with reference to the wants of the individual, whether for fuel, fencing, or timber, or all combined. Our roads, our avenues, the borders of our fields, should be planted with trees; every opening in our existing woodlands should be filled up with one or more of the trees best adapted to the soil and the location; young trees where they spring up should be carefully preserved; and every reasonable exertion made to increase the quantity of our woodlands, and add to their value. Where beauty and utility are so closely combined as in the planting of trees, the farmer should engage in their propagation with alacrity: remembering that besides adding to the beauty of his farm, every tree he plants, and every acre of woodland he cultivates, is money at compound interest, a permanent income, the benefit of which will be realized by his children as well as by himself.

From the Village Record.

MARKS OF GOOD CATTLE.

Mr Snyder—As there is a disposition manifested by many persons to improve their stock of cattle, I have thought that a few observations upon the subject might be acceptable to some of your readers. In Indiana, the two principal objects in breeding cattle appear to be beef and milk. And as certain forms are found to possess particular qualities, I shall proceed to describe what are the proper forms, and what the desirable qualities generally connected with these forms; and in doing this, I shall avail myself of the experience and observations of others.

The head ought to be small and the muzzle fine, the countenance calm, the horns fine; the neck light, particularly where it joins the head; the breast wide, and projecting well before the legs; the shoulders moderately broad at top, and the points well in, so as to leave no hollows behind them when the animal is moderately fat; the girth behind the shoulders should be deep, so that if the carcass was cut across here, it would be an oval, blunt at both ends; the back straight, wide and flat; the ribs broad, and the space between them and the hips small, the flank full and heavy; the belly well kept in and not sinking much in the middle, the ribs globular, wide across, and on a level with the back; the twist should be wide, and the seam in the middle of it well filled; the thigh should be straight, tapering well down to the hock; the legs straight, short-jointed, clean, fine bowed, and standing wide apart; the tail broad towards the top, tapering down, and the smaller towards the bottom the better; the body long, and jointed well to the quarters before and behind; not barrel-shaped, for this does not allow sufficient depth, but a section of the body should be an oval blunt at both ends. Where the body is barrel-shaped, there will be a deficiency both before and behind where it joins the quarters.

I shall now proceed to state the particular advantages of the above described form. The reason why the head should be small and the muzzle fine, is that it facilitates birth; and as the head is composed mostly of bone, it shows fineness of bone, the advantages of which are that the animal possessing them will fatten upon half the food that coarse, big-boned, long jointed ones will require. Calmness of countenance, also, indicates a disposition to get fat—the restless and vicious never fatten kindly. The lightness of the neck is advantageous to the butcher, who will get less coarse meat in such. The wideness of the breast and deep girth give greater room for the lungs. A straight back shows strength, a weak animal being generally sway of hump-backed. Poor keeping will produce those deficiencies in a calf that was at first well formed. The straight back also denotes an aptitude to fatten kindly. Much depends upon the room the lungs have; no animal can be good whose lungs occupy a small space; and the lungs occupy all the space within the ribs, so it is of great importance that the space inside of them should be large—for this reason the ribs should be spread wide, and extend well back towards the hips. The full heavy flank in the cow is a most certain indication of a good milker, and the bull thus formed generally produces cows that milk well. The belly being nearly straight shows strength in the flates. Globular ribs hold much flesh, and it is much easier put on such than upon those that are sharp. Wide ribs give a broader loin and more capacity to the pelvis. From the hips to the rump long and straight with the back, the hind quarter that is thus formed will weigh very heavy, the wideness of the twist, and the filling up of the seam, gives the greater weight to the upper part of the thigh. Straight legs are stronger than crooked ones. Clean legs and small tail show fine bones. Shorts joints in the legs is also an excellent mark of an animal fattening easily, for every animal requires food to fatten it in proportion to the length of the leg. A short-legged animal with a large body will fatten upon less food than a long-legged one with a small body. When the brisket and twist are large, the legs will be wide apart, and it is important that both these be large.'

I have said above that the head should be small; but I did not mean that a bull's head should look like any thing but a bull's head, for if it looks like a steer's or cow's, he will be uncertain in propagating his species. If the neck should be disproportionately long and slender, it denotes a weakly constitution. The body cannot well be too long whilst the legs keep wide apart, as a long body throws much weight in the carcass; but in very long bodies there is a tendency in the legs to get too close together, leaving the breast thin and reducing the twist. This I consider a serious misfortune.

In breeding it is of importance that where there is a deficiency in one, the other should be particularly good in that part, and the best should always be selected for breeders; rejecting every thing that is common. By always selecting the best and breeding from them alone, any stock may be very much improved, so that in a few generations they will hardly look as if they had sprung from such a stock.

I have frequently heard it asked what makes such cattle as I have described worth more than others equally large. There are many reasons; but I will confine myself to three. And first they come earlier to maturity, thus saving in those that are intended for beef two or three years' keeping. They carry more fat and flesh upon the most valuable parts. It is known to persons who are in the habit of buying beef of a butcher, that he makes a difference of four or five cents in a pound of meat taken from different parts of the same animal. Now it must be plain to every one, that those animals which carry their principal weight in those parts that command the highest price, must be worth the most, and of course he will give more for them. They fatten upon half the food that others require; of course they are worth more to the man who fattens them.

Wm. Tichenor.

Mrs Wirt, widow of the late Wm. Wirt, is about to publish a floral dictionary, with 58 engravings.

NEW ENGLAND FARMER,
AND GARDENER'S JOURNAL.

BOSTON, WEDNESDAY, AUGUST 29, 1838.

DAIRY STOCK.

We are daily more and more convinced of the mistakes and folly of our farmers in regard to the management of our dairy and milking stock. If we are thought to recur too frequently to this topic, its great importance must be our apology. We can find cows in numbers of our own native stock which have produced for weeks in the best of the season twelve, and in some cases fifteen pounds of butter per week without being forced by extraordinary feed; and we have known of a dairy of twentynine cows having averaged in a season six hundred and thirty pounds of new milk cheese; and these too all of native stock. Now what stock will do better than this? and why need we look for any other if we will but do ourselves, and these beneficent animals even half justice?

We are perfectly convinced that for milking and dairy purposes we need not go out of the country to find as valuable a stock as can be brought into it. We have heretofore asked the owners of the Improved Durham Short Horn Stock to let us know by actual measurement for a length of time, a week, a month, a season, what their cows will produce. We now go further. Without the slightest prejudice against their stock, and with a grateful sense of the patriotism and public spirit, which has induced them to bring this stock at great expense into the country, we now challenge them to show the well authenticated and exact results of the trials of these improved animals. We, on our part, promise to meet them with time, place and person, with examples of the produce of our own native stock, and then we will compare them together; and we engage to go heartily for the best. The distinguished editor of the Cultivator considers the list of remarkable cows of native stock given in our Report on Essex as hardly deserving of notice, because they were only examples of individuals under a state of high feeding. Now we say with perfect respect to our distinguished friend, produce if you can from all the Improved Short Horns in the country *as many* and *equal examples* of productiveness; under any feeding you please to adopt; and then we are prepared with a longer and a brighter list than we have yet given. But until this is done, let us not be in a hurry to change what we have for a race, whose claims to superiority for dairy purposes yet remain to be established; which can only be procured at a considerable expense, and whose condition can be maintained only by extravagant keeping. For the luxuriant prairies and alluvions of Ohio, Kentucky, and the rich Western States, where size and early maturity are matters of the first importance, we are disposed to believe that this beautiful race of animals, the Improved Durham Short Horns, will prove an invaluable acquisition; but it is not so we believe, at least we want farther light to be convinced that it is so, for the hard hills, the short pastures, and the long winters of New England, where butter and cheese are the great objects of the farmer. We do most earnestly wish that the owners of good cows of any breed would be more particular in ascertaining the products of their cows, that we may not be continually met with guesses, which are altogether capricious; and which take their complexion too often wholly from the private interest, or prejudice, or self-conceit, or vanity of the owner. Get a lactomater and measure your cream. Weigh your milk and observe the pounds and ounces. Measure your milk and let us know whether the vessel you use for this purpose be a beer or a wine quart. Try the whole milk of your cow for a week, a fortnight, or a month, and see how much butter, how many pounds and how many ounces she will yield. This is the proper and the only proper trial and test of her merit.

USEFUL INVENTION.

We were much gratified a few days since in passing through Lee with the ingenious arrangement for obtaining or rather conveying water, adopted on the farm of Mr Cornelius Basset. His house and barn stand on a side hill, and it was not easy to procure water for his cattle. He has a small stream of a permanent character and of excellent water flowing at the bottom of the hill, 20 or it may be 30 rods from his barn yard. He has here placed a small water wheel in a cistern filled by the brook, which is constantly turned by the stream; and, through logs laid to the yard, by means of a forcing pump operated by this wheel the water is sent up to his barn yard and there flows in a constant supply. The whole is a miniature example of the Fairmount Water Works in Philadelphia; and the experiment succeeds to admiration. The expense is trifling as the diameter of the wheel is not more than four feet. The whole is enclosed in a wooden box, so as to be easily covered in winter, and secured from frost. The arrangement reflects honor upon his ingenuity, and his whole farming is a beautiful example of neat, industrious, and highly intelligent cultivation.

BUFFALO BERRY—OR SILVER LEAF SHEPARDIA.—In the planting of trees, has it never occurred to our friends who have small or large gardens in the rear of their houses, that a tree bearing fruit in the winter would be an acquisition? Such a tree can be had. Nature has placed ruminating animals in high latitudes, where for a large portion of the year vegetation generally is sealed to them. To remedy this deficiency, there are trees and plants which are accessible and nutritious in the winter season. Among these, one of the most beautiful and useful is the silver leaf Shepardia, which is indigenous to our Rocky Mountains. When in foliage, the tree is beautiful indeed. Its leaves on the upper side are of a deep green, and beneath are silver. As the winds lift them a beautiful effect is produced by the shifting colors; the light silver green glancing in relief against the darker olive. Something similar may be noticed in one of the trees in the Park, between the site of the old Bridewell and the Sessions Court. In the winter the fruit of the Shepardia comes to maturity. It is a red berry, growing in thick clusters. Slightly acid, it is very agreeable in taste, and capable of sustaining life, as many explorers and trappers have proved. It makes too, most capital conserves and jellies. The tree may be obtained of the Messrs Winship in Brighton, Mass. Now, or soon is the season for setting out, and transplanting trees, and whoever orders this, or any other, of the Messrs Winship, will be promptly answered, and faithfully.—*N. Y. Sun.*

Massachusetts Horticultural Society.

EXHIBITION OF VEGETABLES.

Saturday, August 18, 1838.

Mr Dana Parks of Roxbury, exhibited a fine large Autumnal Marrow Squash of the true sort weighing 37 1-2 lbs.

Mr Rogers of Watertown a basket of large late Lima Beans, extra fine. Also, without name, a basket of Tomatoes of unusually large size.

For the Committee,
SAMUEL POND, *Chairman.*

FLOWERS.

Saturday August 25, 1838.

By Thomas Lee, Esq. of Brookline, Hibiscus, Manihot, Portulaca pilosa, Gerardia flava, do. purpurea, a variety of Altheas, (one of which was new to us) and many other specimens of choice flowers.

By Dr J. C. Howard of Woodland, Brookline, a very fine Bouquet, and some specimens of the following varieties of the Dahlia, viz: Countess of Liverpool, Royal William, Beauty of Cambridge, Ophelia, &c.

Bouquets.—By Messrs Winship, Walker, Hovey & Co. and Jno. Hovey.

Dahlias.—By S. Walker, viz: Jackson's Rival Yellow, King of Dahlias, Picta formosissima, Duchess of Buccleugh, and Belledonna.

For the Committee,
S. WALKER, *Chairman.*

FRUITS.

There was quite a display of Plums, and the exhibition was greatly indebted to Messrs Pond and Johnson for its attractions.

By Mr Pond, Smith's Orleans, Duane's Purple, Pond's Seedling, Green Gage or Reine Claude, Washington, White Gage, and Corse's Nota Bene *Plums*. William's Bon Chretien or Bartlett, Andrews, Julienne and Cushing *Pears*.

By Mr Johnson, Washington, Green Gage, and White Gage *Plums*.

By Thomas Lee, Esq., Early Ann *Peaches*; this variety has proved with him, hardy and productive for a number of years past.

Melons.—The Napoleon Melon—very fine appearance and most delicious flavor.

By Dr J. C. Howard, from his garden Woodland, Brookline, Netted Cantaleupe, Melon de Roche de Careire, or Queen's pocket, and Napoleon *Musk Melons*, the two latter new kinds, and Red Siberian *Crab Apples*.

By M. P. Sawyer, Esq. from his garden at Portland, two varieties of *Peaches* (grown under glass) of extraordinary size and beauty.

By S. Walker, Esq., *Plums*, and Green Chissel *Pears*.

By S. Downer, Esq., Washington, Frederic of Wurtemburg, (Capeaumont) and Julienne *Pears*. William's Favorite Apples, very handsome.

From Mrs C. H. Jones garden, Friend street, Smith's Orleans Plums, very large and fine.

For the Committee,
E. M. RICHARDS, *Chairman.*

VEGETABLES.

Tomatoes, or love apple, from J. L. L. F. Warren, Brighton.

A vegetable curiosity brought from Asia, by the Rev. Mr Malcolm, exhibited for a name by C. W. Green, Esq.

For the Committee,
SAMUEL POND, *Chairman.*

Mr Luman Bartlett of this town has reaped *sixtymine* shocks of Flint Wheat from one acre and five rods of upland. The farm on which this was raised was formerly owned by Mr H. G. Bowers of this town, who, by intelligent and scientific experiments, put the soil in the finest order. Mr B. is now cultivating one of the best farms in Illinois, and doubtless his taste and fondness for the pursuit will do much there to elevate and improve the noble calling of Agriculture.—*Northampton Cour.*

Connecticut River is lower than it was ever known to be before. The small factory streams that flow into it are nearly dried up.

NOTICE.

The General Committee of Arrangements, are requested to meet at the rooms of the Massachusetts Horticultural Society, 23 Tremont Row, on Saturday, 1st September, at 10 o'clock, A. M.

The Special Committee are requested to meet as above, on Saturday, 1st September, at 11 o'clock, A. M Per order,
SAMUEL WALKER, *Chairman.*

BRIGHTON MARKET.—Monday, August 27, 1838.

Reported for the New England Farmer.

At Market about 475 Beef Cattle, 500 Stores, 5,000 Sheep, and 500 Swine.

A large number of Beef Cattle, several lots of Stores, Sheep and Swine unsold.

Prices—*Beef Cattle.*—Several lots of cattle were purchased on Saturday, at a higher price probably than sales to day for a like quality. We reduce our quotations a trifle. First quality $7 37 1-2. Second quality, $6 75 a $7 00. Third quality, $5 50 a $6 50

Stores—Yearlings, $9 a $12. Two Year Old, $15 a $20. Three Year Old, $20 a $25.

Sheep.—"Dull." Lots were sold at $1 42, $1 62, $1 88, $2 00, $2 25, and $2 75.

Swine.—A lot of selected Old Barrows at 7, and a lot of selected Barrow Shoats at a trifle over 8. A lot to peddle at 6 1-2 for Sows and 7 1-2 for Barrows. At retail from 7 to 9.

MULBERRY TREES.

200,000 Genutne Mulberry Trees, and as many more as may be wanted, of the most approved kinds—consisting of the best selected varieties now in use, for cultivation, feeding worms, and making silk;—being acclimated to this country, and adapted to either warm or cold climates, affording a rare opportunity for companies or individuals to be supplied, from the most extensive collection of mulberrry trees ever seen in any village within the United States.

Autumn is decidedly the best time for removal, and orders left with Messrs. I. B. Colt, Secretary of the Connecticut Silk Manufacturing Company, Hartford; Alonzo Wakeman, at the office of the American Institute, No. 187 Broadway, N. Y.; Thomas Lloyd, Jr. No. 236 Filbert street, Philadelphia, Pa.; Luther I. Cox, Baltimore, Md.; B. Snider, & Co. Savannah, Ga.; Bliss Jenkins, &Co. Mobile, Al; James Lyman, St. Louis, Mo.; Case and Judd, Columbus, O.; G. Harwood, Rochester, N. Y.; and the publishers of this advertisement, or with the subscriber, in Northampton, Mass.

Orders left with the above gentlemen will be promptly attended to, and each will be furnished with samples of the foliage.

Several valuable farms may be had with or without Mulberry Plantations

Apply at the office of D. STEBBINS.
Northampton, Aug 22, 1838.

REMEDY FOR CANKER WORMS.

The subscriber having obtained letters patent for his circular metallic trough and roof for preventing canker worms or other insects from ascending fruit or other trees, now offers his services to apply the same to any extent that may be wanted. They were put on to three orchards belonging to Jonathan Dennis in Portsmouth, R. I., in the autumn of 1837, and exterminated the canker worms so completely that some of the trees hang so full of apples as to render it necessary to prop them, although they have been eaten by the worms for a number of years previous, notwithstanding the application of tar. The public are invited to examine the orchards above referred to. The trough and roof is made of lead and bent to conform to the shape of the tree, and the ends soldered together and made enough larger than the tree to allow the trees to grow ten years before it will fill the space. The space between the trough and the tree is filled with hay, straw, seaweed, or any substance that is easily compressed by the growth of the tree; the trough is kept in its place by three nails driven into the tree below it; when the tree has grown so as to fill the space, the trough may be enlarged by putting in a short piece so as to answer ten years more. A little cheap oil is sufficient to fill the troughs and filling them three times has been found to answer for one year, by stirring the oil once sometime after they are filled. Those who wish to have their trees fitted, would do well to make early application to the subscriber, postage paid. For sale, State, Town and County rights by

JONATHAN DENNIS, Patentee,
Portsmouth, R. I., August 22, 1837. 4w

MIDDLESEX AGRICULTURAL SOCIETY.

The Committee on Farms, Fruit, Mulberry, Forest Trees and Shrubs, will meet at the Middlesex Hotel in Concord, on Monday, the third day of September next, at nine o'clock, A. M., and will then proceed to view such farms, &c. as have been entered for premiums.

NAHUM HENDY, Waltham,
JOHN H. LORING, Groton,
ELI RICE, Marlborough,
WM. BUCKMINSTER, Framingham,
CYRUS WARREN, Concord,
} Committee.

All applications must be made to some one of said committee, or to the secretary of the society, on or before the above time.

TIMOTHY PRESCOTT, *Secretary.*
Concord, August 13, 1838.

FRUIT AND ORNAMENTAL TREES, MULBERRIES, &c.

Nursery of William Kenrick.

The Catalogue of Fruit and Ornamental Trees for 1838 is now ready, and will be sent to all who apply. It comprises a most extensive selection of the superior varieties of Pears, Apples, Plums, Peaches, Cherries, Quinces, Gooseberries, Raspberries, Currants, Strawberries, Grape Vines, &c. The stock of Cherries and Peaches now ready is particularly large. Also, Ornamental Trees, Shrubs, Roses, Honeysuckles; Pæonies, Dahlias and other Herbaceous Flowering Plants.

225,000 Morus Multicaulis are now offered for sale; the trees genuine and fine, will be ready for delivery at the cities of Boston, New York and Philadelphia, in October next, at prices fair, and varying with the size, and the quantity which may be desired. Also, Broussa and other varieties.

Mulberry and other trees, when so ordered, will be securely packed for safe transportation to distant places, and all orders promptly executed, on application to B. D. Breck, Commission Store, No. 132 Water Street, New York, M. S. Powell, Seed Store, No. 7 Arch Street, Philadelphia, or to the subscriber, Nonantum Hill, Newton, near Boston.

August 1, 1838. WILLIAM KENRICK.

FARM FOR SALE.

That large and beautiful farm, late residence of the Hon. Judge Dame, situated in Rochester, N. H. six miles from the village of Dover, and four miles from Great Falls. Said farm contains upwards of 300 acres of land and a large and well finished two story house, with barns and other outbuildings in good repair. About 150 acres are covered with hard and pine wood, besides a good portion of heavy timber. There are also on the premises large quarries of the most desirable granite. Any person desirous of purchasing may learn further particulars on application to Joseph Breck & Co., No 51 and 52 North Market Street, Boston.

August 15, 1838.

NEW ELEMENTARY WORK ON BOTANY.

Peter Parley's Botany; with descriptions of Trees, Shrubs and Plants; with a large number of fine engravings.

The publishers invite Teachers, and others interested in this subject, to examine this work, as they believe it will be found one of the most practically useful in use, being a complete manual of Botany for the adult and the pupil.

Parley's Cyclopedia of Botany.—This work appears to be exactly what is wanted by young persons and in families. It not only contains the strictly scientific part of the subject, in an introduction and very full and complete genera of Plants, but it also contains a copious glossary of terms, and what is most important, a Dictionary of Plants, of nearly 300 pages, containing familiar descriptions of all the most interesting trees, plants, and shrubs.—These are alphabetically arranged, with an English index, so that the reader may immediately turn to any plant he wishes to read about. The work is illustrated by over 200 engravings, and is sold very cheap.—*Boston Paper.*

For sale at the New England Farmer Office, 51 & 52 North Market Street. JOSEPH BRECK & CO.

COUNTRY SEAT IN NEWTON, FOR SALE.

The subscriber offers for sale the house in which he now resides, with the Barn, Sheds, Garden and about 35 acres of land situated on Nonantum Hill, in Newton, 5 1-2 miles from the city. The garden occupies nearly two acres, is stocked with a great variety of fruit tress, and abont 10,000 Antwerp Raspberry Vines. The place may be seen and further particulars obtained on application at the premises.

LOT WHEELRIGHT.
July 16th.

WINTER RYE.

Just received at the New England Seed Store and Farmer Office, a few bushels of prime Winter Rye

JOSEPH BRECK & CO.
Aug. 13, 1838.

FOR SALE.

A two years old Bull of the Cream pot breed; from Mr Jaqueth's stock at Ten Hill Farm, Charlestown. Cows of the above breed make the most butter of any stock in this country Inquire of the subscriber near the factories in Waltham. ISAAC PARKER.

FOR SALE.

A Ram and Ewe from the Cape Good Hope. Inquire at this office.

SITUATION WANTED,

As Gardener, by a young man of practical knowledge and can be well recommended. A Situation West or South would be preferred. Address R. B. through the office of this paper.

PRICES OF COUNTRY PRODUCE.

CORRECTED WITH GREAT CARE, WEEKLY.

		FROM	TO
Apples,	barrel		
Beans, white, Foreign,	bushel	1 25	1 50
" " Domestic,	"	2 25	2 50
Beef, mess,	barrel	15 00	16 00
No. 1.	"	13 50	
prime,	"	12 00	
Beeswax, (American)	pound	28	32
Cheese, new milk,	"	6	10
Feathers, northern, geese,	"		
southern, geese,	"	37	45
Flax, (American)	"	9	12
Fish, Cod,	quintal	3 62	3 75
Flour, Genesee, cash,	barrel	7 75	8 00
Baltimore, Howard street,	"		
Baltimore, wharf,	"		
Alexandria,	"	6 87	7 00
Rye,	"	5 00	5 50
Meal, Indian,		4 00	4 25
" " " barrels,			
Grain: Corn, northern yellow,	bushel		
southern flat, yellow,	"	1 00	
white,	"	95	
Rye, northern,	"		
Barley,	"		
Oats, northern, (prime)	"	47	50
Hay, best English, per ton of 2000 lbs.			16 00
Eastern screwed,		12 00	14 00
Honey, Cuba.	gallon	50	52
Hops, 1st quality,	pound	7	8
2d quality,	"	5	6
Lard, Boston, 1st sort,	"	12	13
southern, 1st sort,	"	12	
Leather, Philadelphia city tannage,	"	26	27
do. country do.	"	20	22
Baltimore city tannage,	"	25	26
do. dry hides,	"		
New York red, light,	"	18	19
Boston, do. slaughter,	"	19	20
Boston dry hides,	"	17	19
Lime, best sort,	cask	80	85
Mackerel, No. 1,	barrel	12 00	12 25
Plaster Paris, per ton of 2200 lbs.	cask	2 50	2 62
Pork, extra clear,	barrel	26 00	
clear,	"	24 00	25 00
Mess,	"	22 00	23 00
Seeds: Herd's Grass,	bushel	2 63	3 00
Red Top, southern,	"	80	1 00
northern,	"		
Hemp,	"	2 62	3 00
Red Clover, northern,	pound	18	20
Southern Clover,	"	17	18
Soap, American, No. 1,	"	6	7
" No. 2,	"	5	6
Tallow, tried,	"	10	11
Teazles, 1st sort,	pr M.	3 00	3 50
Wool, prime, or Saxony Fleeces,	pound	50	53
American, full blood, washed,	"	45	48
do. 3-4ths do.	"	42	45
do. 1-2 do.	"	38	40
do. 1-4 and common,	"	35	37
Northern pulled, Pulled superfine,	"	42	48
No. 1,	"	38	40
No. 2,	"	28	30
No. 3,	"		

PROVISION MARKET.

RETAIL PRICES.

Hams, northern,	pound	15	17
southern and western,	"	15	18
Pork, whole hogs,	"	9	10
Poultry, per pair,	"	50	1 25
Butter, tub,	"	20	22
lump,	"	25	27
Eggs,	dozen	16	18
Potatoes, new,	bushel	60	65
Cider,	barrel	2 75	3 00

CHERRIES.

One dollar and fifty cents per bushel, given for full ripe, fresh, picked and clear of the stems, Rum Cherries, at No. 58 Broad Street, Boston.

4w

NOTICE TO SUBSCRIBERS.

Subscribers can have the New England Farmer neatly bound for seventy five cents per volume, by leaving them at this office.

Aug. 15, 1838.

MISCELLANEOUS.

THE BIBLE.

Lamp of our feet! whereby we trace,
Our path when wont to stray;
Stream from the fount of heavenly grace
Brook by the traveller's way!

Bread of our souls! whereon we feed,
True manna from on high!
Our guide and chart! wherein we read
Of realms beyond the sky!

Pillar of fire—through watches dark!
Or radiant cloud by day!
When waves would whelm our tossing bark—
Our anchor and our stay!

Pole-star of life's tempestuous deep!
Beacon! when doubts surround,
Compass! by which our course we keep!
Our deep-sea lead—to sound.

Riches in poverty! Our aid
In every needful hour!
Unshaken rock! the pilgrim's shade,
The soldier's fortress tower!

Our shield and buckler in the fight!
Victory's triumphant balm!
Comfort in grief! in weakness, might!
In sickness—Gilead's balm!

Childhood's preceptor! manhood's trust!
Old age's firm ally!
Our hope—when we go down to dust—
Of immortality!

Pure oracle of Truth Divine!
Unlike each fabled dream,
Given forth from Delphi's mystic shrine,
Or grove of Academe!

Word of the ever-living God!
Will of His Glorious Son!
Without thee how could earth be trod,
Or heaven itself be won?

STATE OF MAINE.

LAND OFFICE,
Bangor, April 30, 1838.

The twelfth section of "an act additional to promote the sale and settlement of the public lands," passed March 24, A. D. 1835, making it the duty of the Land Agent "to advertise the settling lands in market, once a year, for two months, in one paper in the city of Boston, one in Concord, N. H. and in one paper in each county in the State, describing the quality and situation of said land and the terms of sale," the Land Agent hereby gives public notice that Township number 4, in the fifth range of Townships west from the east line of the State, has been lotted for settlers, and is now in the market for sale and settlement under the provisions of the following law passed at the last session of the Legislature. The price will be from fifty to seventyfive cents per acre, according to the quality and situation of the lots. The lots average 160 acres each. The soil in this township is good, being remarkably free from stones, and the land lying in moderate swells. The location of this township is favorable for settlement, as the Aroostook road passes within one mile of the western line of the township. There are between 40 and 50 settlers in the adjoining township No. 4 in the 6th Range, and a good saw mill and grist mill have recently been built there by Ira Fish, Esq. only one mile distant from this township.

Townships No. 3 in the 4th Range, No 7 in the 6th Range, and No. 8 in the 7th Range have been surveyed and lotted into mile sections. Lots of 160 acres will be run out from any of these sections to actual settlers, where the land is more suitable for farming than for timber. Townships Nos. 8, 10 and 12 in the 5th Range have been ordered to be surveyed, by the Surveyor General, forthwith, and will be open for settlers as soon as the lots can be run out. The Aroostook road passes directly through these townships and the soil is represented to be excellent for farming. The Aroostook road is laid out and cut out from the military road leading from Bangor to Houlton, near Mattawamkeag Point to the Aroostook river, a distance of about 75 miles.

About $17,000 will be expended this year, upon this road by the Land Agents of Maine and Massachusetts, and with the part already finished the road will be completed about one half of the distance. The whole distance will probably be completed next year. All the land on this road has been sold for about two thirds of the distance, and in several townships all the lots upon the road have been taken up by actual settlers. The remaining part of the land upon this road, owned by this State is now offered for sale to settlers. The price of lots in these townships under the condition of the new land law will be from fifty cents to one dollar per acre, according to their situation and quality. Should any company of settlers select any unsurveyed township in this part of the State on which they should wish to erect mills under the provisions of the new land law, the Surveyor General would proceed as soon as practicable in the survey of such township.

The settling duties required by law, are "that the purchaser of each lot shall clear in a proper manner, fifteen acres thereof, ten or more of which shall be well laid down to grass, and build a house thereon, within four years from the time of the purchase."

The board of Internal Improvement for this State have just ordered an exploration and survey of all the lands situated in the Aroostook country in reference to their settlement and agricultural capabilities. This survey will be commenced forthwith under the charge of Dr Ezekiel Holmes, of Winthrop. His report of the situation, quality and value of the public land in this part of the State may be expected in the course of the season, and will give all needful information, to those persons who may feel desirous of making a settlement upon them.

The following extracts from the second report of Dr. Jackson on the Geology of the public lands, made to the Legislature, and now in the hands of the printer for publication, show the value of these lands for cultivation. Speaking of the Aroostook country the Doctor says, "the average width of the alluvial region on the Aroostook river cannot be less than six or eight miles, and in some places it is much wider. It is a well wooded region and is the best settling land in the State, equalling in fertility the famed regions of the Western States, and capable even under a less genial clime, of producing crops of wheat and other grain, fully equal in abundance with any soils of which we have any records.

"We here found a yellow loam of a fine kind derived from the limestone rocks and luxuriant in its produce, and in some places covered to the depth of 4 or 5 inches by a black vegetable mould.

This yellow loam is remarkable for the tall rank grass called blue joint, which skirts the margin of the river and from 4 to 5 feet high and extremely luxuriant. The forest trees are of a mixed growth, but the sugar maples are most abundant, and are of gigantic size. Elms, white birch, black and white ash also abound. The soft wood grows mostly on the low lands, while the uplands in the rear are densely crowded with hard wood trees, among which are scattered magnificent pines. In the course of two years, there will be a free communication between Bangor and the Aroostook and a great number of enterprising settlers will take up their residence in this fertile valley, and by farming, they will obtain an ample reward, and that region will become as it is destined by nature to be the *granary* of the north."

In another place Doctor Jackson says—"On the Aroostook it will be remarked, that very few if any hemlock trees exist, and the predominating growth is of a mixture of various hard wood trees, the sugar maple, ash and yellow birch abounding, while occur scattering, some of the most lofty pine trees ever beheld. There are evident reasons why this should be the case, for the richest soils are always most crowded with a mixed growth, and the Aroostook soils are mostly of limestone alluvion, and are exceedingly rich and good settling lands remarkable for their heavy crops of wheat, rye and other grains, and are certainly richer as an agricultural district, than any other portion of Maine. The present population on this river is estimated between 400 and 500 persons, chiefly emigrants from Maine."

Towards the conclusion, Dr Jackson says: "the researches of the present season have brought to light many important resources in the public domain which were before unknown. Beds of iron ore of immense magnitude favorably situated for advantageous operations occur on the Aroostook, and all the marked characteristics of the regular coal formation exhibit themselves over a great belt of country from the Schoois to the Aroostook and St. John, and extend to the Temmiscouta lake near the frontier of Canada. It will be at once perceived, that the country which we have explored is a most valuable territory, possessing every advantage required by settlers. Heavy timber offers a reward to the enterprising lumber dealer. A rich soil capable of producing an average crop of 20 bushels of wheat to the acre, and in some cases producing from 30 to 40 bushels, offers an ample reward to the husbandman. Inexhaustible supplies of limestone, valuable both for building materials and for agriculture, vast and inexhaustible mines of rich iron ore, amid interminable forests which will furnish an abundance of charcoal, required for the manufacture of the finest kind of iron and steel—the country presents every natural advantage that might be required to call forth the enterprise and industry of the farmer and manufacturer."

By an inspection of the map of Maine, it will be seen that there are nearly one hundred townships of land situate on the Aroostook river and its tributaries, one half of which belongs to the State of Maine and is now open for sale and settlement under the new land law. Considering the remarkable fertility of the soil in this region, and the high price of produce, and the ready market which it finds among the lumbering people on the Penobscot and St. John rivers, and the advantages of the road now making by Maine and Massachusetts into this region, it is believed that an uncommon opportunity is now offered to persons who may feel desirous of obtaining good farms at a low price.

The field notes of the surveys of all these townships are in the Land Office, open to the inspection of every person, and all information that may be received here, from time to time, from the progress of surveys, and the reports of Agents, will be cheerfully given to all inquirers, and every facility granted within the means of this office, to secure to individuals and companies, all the benefits and privileges intended by the Legislature, for actual settlers under the provisions of the following law.

ELIJAH L. HAMLIN,
Land Agent of Maine.

STATE OF MAINE.

In the year of our Lord one thousand eight hundred and thirty-eight. An act additional to promote the sale and settlement of the Public Lands.

SECTION 1. *Be it enacted by the Senate and House of Representatives in Legislature assembled*, That all lands lotted to settlers shall be sold to those only who will perform settling duties on the same as prescribed by law, the price to be fixed by the Land Agent, having reference to the field notes, not however at a less price than fifty cents per acre; three fourth parts of said price to be paid within three years from the time of said sale in labor to be laid out in making roads in such township where said lands so sold are situated, under the direction of the Land Agent; and the remaining fourth part to be paid in cash within four years from the time of said sale.

SEC. 2. *Be it further enacted*, That whenever twenty or a less number of individuals, shall each select a lot of one hundred and sixty acres of land in any township lotted for settlers, the same having no mill within its limits and shall give bonds satisfactory to the Land Agent, that they will within the term of three years from the time of said selection, erect in a proper and substantial manner, a saw mill and grist mill, on such lot within said township, as shall be designated by the Board of Internal Improvement, the same shall be entitled to a deed of such lot; and each individual shall receive a deed from the Land Agent for his respective lot, without any further consideration, conditioned however, for the performance of the settling duties required by law.

SEC. 3. *Be it further enacted*, That from and after the passage of this act, all acts and parts of acts inconsistent with the provisions of this act, be and the same are hereby repealed.

In the House of Representatives, March 23, 1838.—This bill, having had three several readings passed to be enacted. ELISHA H. ALLEN, Speaker.

In Senate, March 23, 1838. This bill having had two several readings, passed to be enacted.
N. S. LITTLEFIELD, President.

March 23, 1838. Approved.
EDWARD KENT.

Secretary's Office,
Augusta, March 26, 1838.

A true copy of the original on file.
Attest, SAM'L. P. BENSON,
Secretary of State.

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